



India Meteorological Department
(Ministry of Earth Sciences)

BULLETIN NO.4 (BOB/02/2022)

TIME OF ISSUE:2030 HOURS IST

DATED: 20.03.2022

FROM: INDIA METEOROLOGICAL DEPARTMENT (FAX NO. 24643965/24699216/24623220)

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Sub: Depression over north Andaman Sea and adjoining southeast Bay of Bengal: Pre cyclone watch for Andaman Islands and adjoining sea areas (Yellow Message)

The Depression over southeast Bay of Bengal and adjoining south Andaman Sea, moved north-northeastwards at a speed of 12 kmph and lay centered at 1730 hours IST of today, the 20th March, over north Andaman Sea and adjoining southeast Bay of Bengal, near latitude 10.9°N and longitude 93.2°E, about 200 km north-northeast of Car Nicobar (Nicobar Islands), 100 km south-southeast of Port Blair (Andaman Islands) and 730 km south-southwest of Yangon (Myanmar). It is likely to move nearly northwards along & off Andaman & Nicobar Islands, intensify into a deep depression during next 12 hours and into a cyclonic storm during subsequent 12 hours.

Forecast track and intensity are given in the following table:

Date/Time(IST)	Position (Lat. °N/ long. °E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
20.03.22/1730	10.9/93.2	45-55 gusting to 65	Depression
21.03.22/0530	12.1/93.5	55-65 gusting to 75	Deep Depression
21.03.22/1730	13.6/93.7	65-75 gusting to 85	Cyclonic Storm
22.03.22/0530	15.2/93.8	60-70 gusting to 80	Cyclonic Storm
22.03.22/1730	16.8/93.9	55-65 gusting to 75	Deep Depression
23.03.22/0530	18.4/94.0	40-50 gusting to 60	Depression

Warnings:

(i) Rainfall (warning graphics enclosed)

20th March: Light to moderate rainfall/thundershower at most places with **heavy to very heavy rainfall at a few places and isolated extremely heavy rainfall** are very likely over Andaman and Nicobar Islands.

21st March: Light to moderate rainfall/thundershower at most places with **heavy to very heavy rainfall at a few places and isolated extremely heavy rainfall** are very likely over north Andaman Islands. Light to moderate rainfall at a few places is likely over Nicobar Islands.

(ii) Wind warning

- **20th March:** Squally winds speed reaching 45-55 kmph gusting to 65 kmph prevail over Andaman and Nicobar Islands, Andaman Sea and adjoining southeast Bay of Bengal.
- **21st March:** Squally winds speed reaching 55-65 kmph gusting to 75 kmph are very likely to prevail over Andaman and Nicobar Islands, eastcentral Bay of Bengal and adjoining southeast Bay of Bengal from 21st early morning. It would gradually increase becoming Gale winds speed reaching 65-75 kmph gusting to 85 kmph over the region from evening of 21st March.
- **22nd March:** Gale winds speed reaching 60-70 kmph gusting to 80 kmph very likely to prevail over eastcentral Bay of Bengal and adjoining north Andaman Sea & along & off Myanmar coast. It is likely to weaken gradually becoming squally winds speed reaching 55-65 kmph gusting to 75 kmph over the same region from 22nd evening. Squally wind speed reaching 40-50 kmph gusting to 60 kmph is likely to prevail over north Andaman Islands and adjoining southeast Bay of Bengal, northeast Bay of Bengal and along & off southeast Bangladesh coast.
- **23rd March:** Squally wind speed reaching 40-50 kmph gusting to 60 kmph is likely to prevail over eastcentral Bay of Bengal, adjoining northeast Bay of Bengal and along & off north Myanmar - southeast Bangladesh coasts.

(iii) Sea condition

- **20th March:** Sea condition is very likely to be rough to very rough over Andaman Sea and adjoining southeast Bay of Bengal
- **21st March:** Sea condition is very likely to become very rough to high over north Andaman Sea and adjoining southeast & eastcentral Bay of Bengal.
- **22nd March:** Sea condition is very likely to become very rough to high over eastcentral and adjoining southeast & northeast Bay of Bengal and north Andaman Sea and along & off Myanmar coast. It would be rough to very rough over northeast Bay of Bengal and along & off southeast Bangladesh coast during the same period.
- **23rd March:** Sea condition is very likely to be rough to very rough over eastcentral Bay of Bengal Andaman Sea and adjoining northeast Bay of Bengal & along & off north Myanmar- southeast Bangladesh coasts.

(iv) Fishermen Warning (Graphics enclosed)

Fishermen are advised not to venture

- Into southeast Bay of Bengal during 20th – 21st March.
- Into Andaman Sea and along & off Andaman and Nicobar Islands during 20th to 22nd March.

- Into eastcentral Bay of Bengal during 21st to 22nd March and into northeast Bay of Bengal on 22nd March.

(v) EXPECTED IMPACT & ACTION SUGGESTED for Andaman and Nicobar Islands

A. Impact Expected

- Breaking of tree branches and uprooting of small trees.
- Partial disruption of power and communication lines.
- Localized Flooding of roads, inundation and water logging in low lying areas.
- Occasional reduction in visibility due to heavy rainfall.
- Disruption of traffic due to water logging in roads leading to increased travel time.
- Adverse impact on marine and tourist activities along the coasts.
- Damage to kutcha roads.
- Possibilities of damage to vulnerable structure.
- Localized Landslides/Mudslides
- Damage to horticulture and standing crops in some areas due to squally wind and inundation.

B. Action Suggested

- Total suspension of fishing and tourism activities during 20th to 22nd March.
- Avoid going to areas that face the water logging problems often.
- People are advised to be in safe areas and avoid staying in vulnerable structure.
- Regulate and suspend off-shore activities during 20th to 22nd March.
- Regulate air-traffic on 20th and 21st March, 2022.
- Check for traffic congestion on your route before leaving for your destination.
- Follow any traffic advisories that are issued in this regard.

Next message will be issued at 0230 hours IST of 21st March, 2022.

(Ananda Kumar Das)
Scientist-E, RSMC, New Delhi

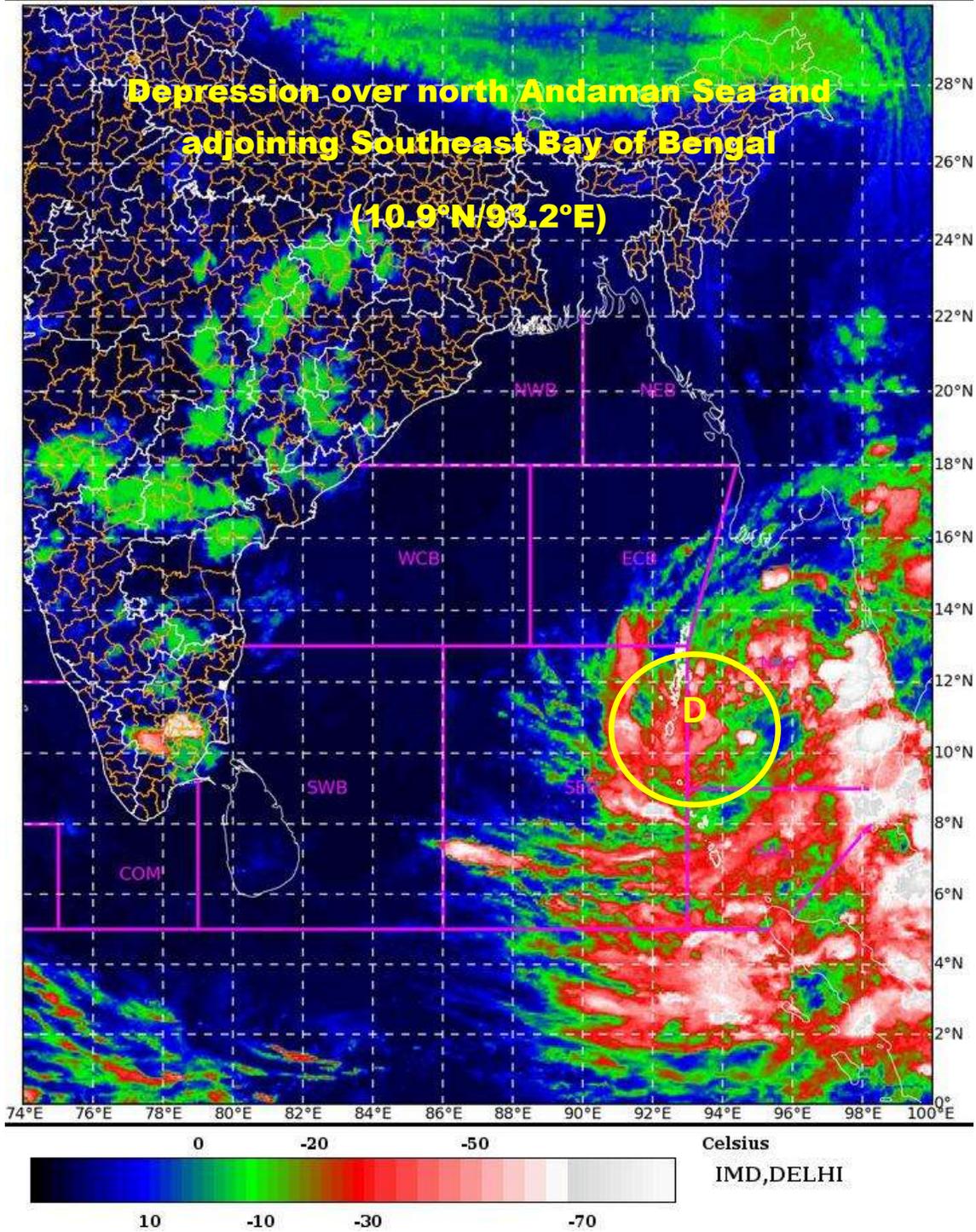
Copy to: ACWC Kolkata/ ACWC Chennai/ CWC Bhubaneswarr/CWC Vishakhapatnam/MO Port Blair

LEGEND: Heavy Rainfall: 64.5 to 115.5mm, **Very Heavy Rainfall:** 115.6 to 204.4mm **Most Places:** more than 76% of total stations, **Isolated Places:** Less than 25% of total

SAT : INSAT-3D IMG 20-03-2022/(1330 to 1356) GMT

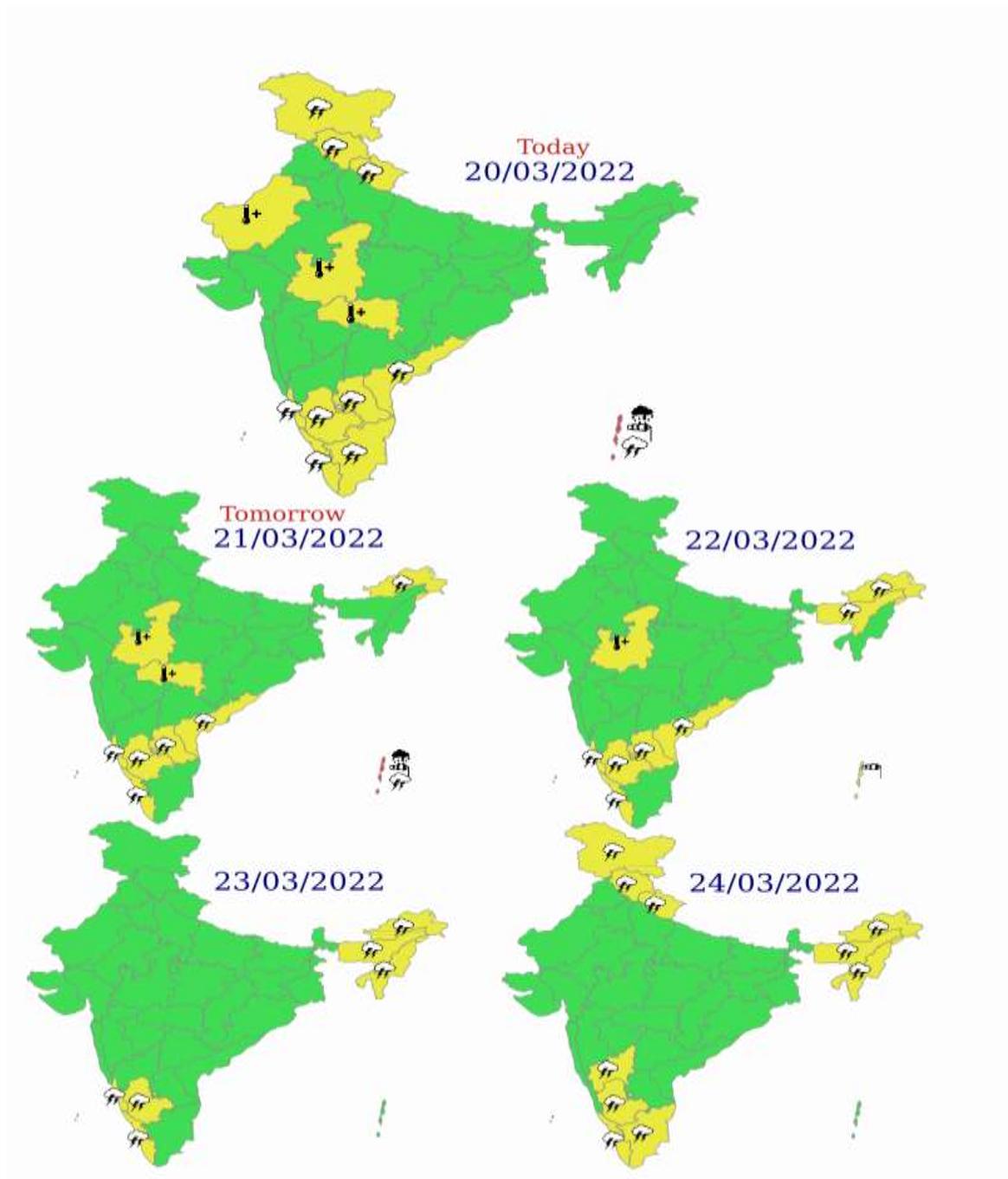
IMG_TIR1_TEMP 10.8 um 20-03-2022/(1900 to 1926) IST

L1C Mercator



D: Depression

Rainfall Warning Graphics

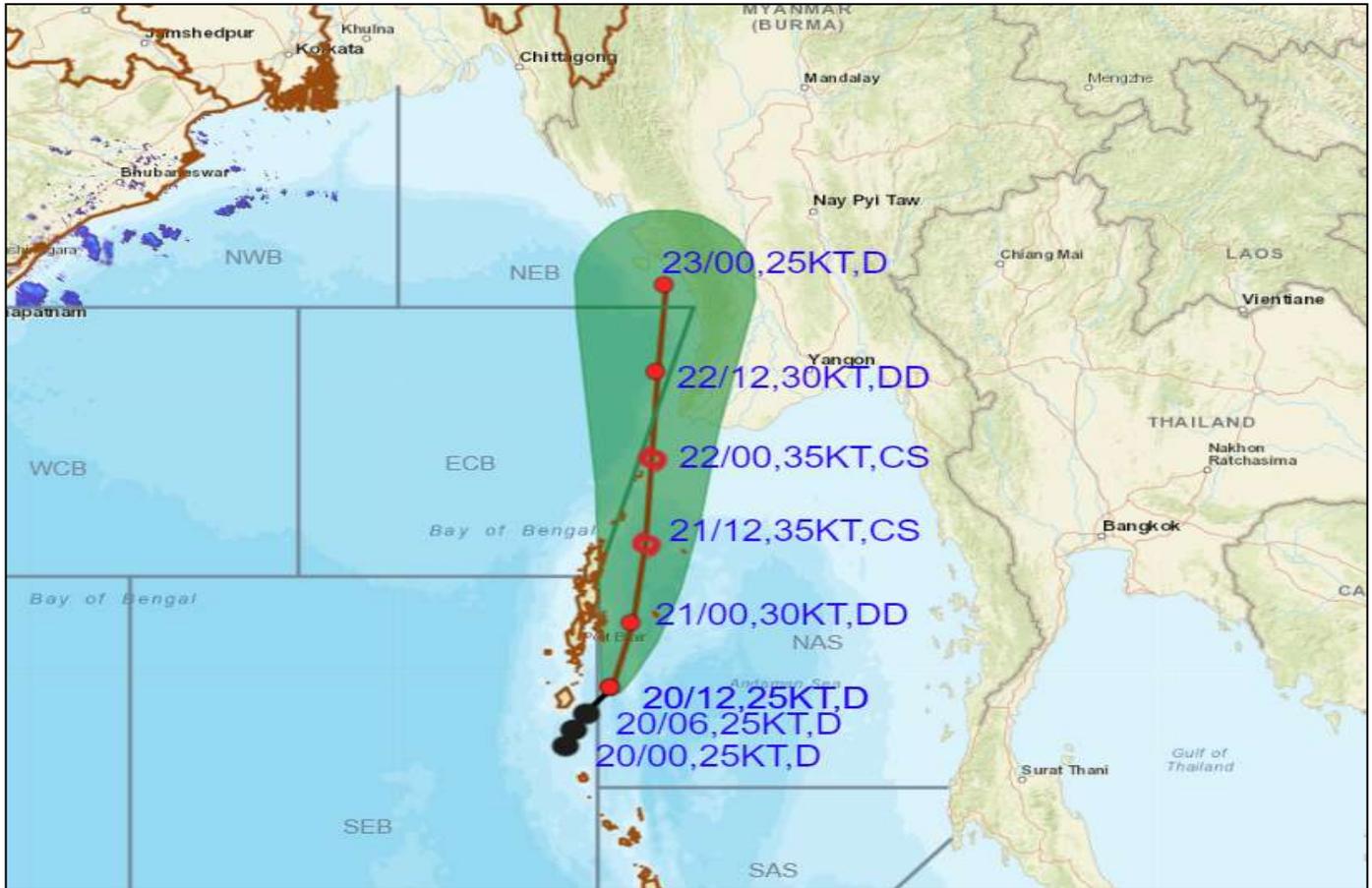


WARNING
WARNING (TAKE ACTION)
ALERT (BE PREPARED)
WATCH (BE UPDATED)
NO WARNING (NO ACTION)

	Heavy Rain
	Strong Winds



OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF DEPRESSION OVER NORTH ANDAMAN SEA AND ADJOINING SOUTHEAST BAY OF BENGAL ON 1200 UTC OF 20TH MARCH 2022



DATE/TIME IN UTC
 IST=UTC + 0530
 L: LOW PRESSURE AREA
 WML: WELL MARKED LOW PRESSURE AREA
 D: DEPRESSION (17-27 KT)
 DD: DEEP DEPRESSION (28-33 KT)
 CS: CYCLONIC STORM (34-47 KT)
 SCS: SEVERE CYCLONIC STORM (48-63KT)
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
 ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
 SuCS: SUPER CYCLONIC STORM (\geq 120 KT)

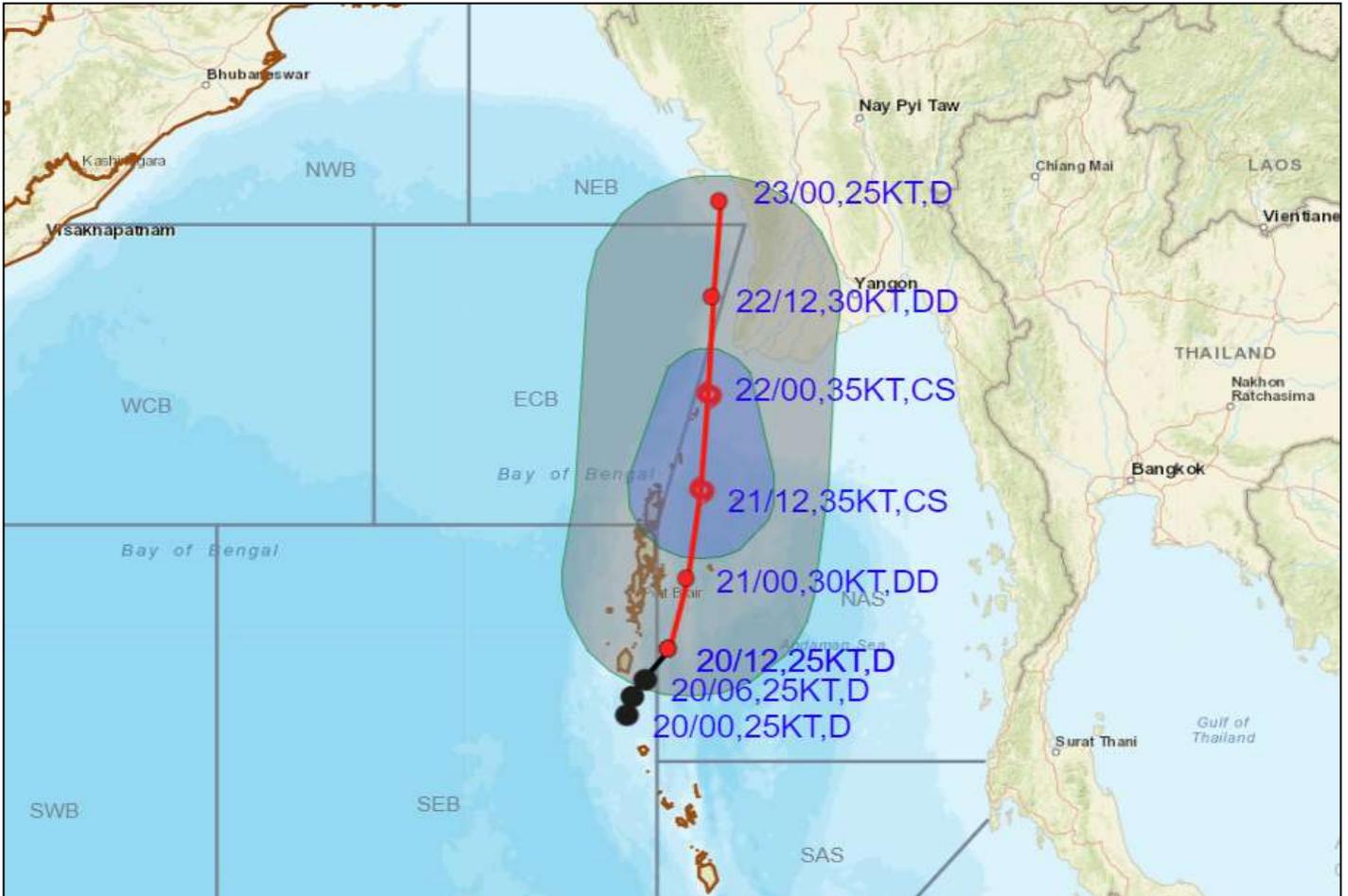
- LESS THAN 34 KT
- 34-47 KT
- \geq 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY

STATIONS	DISTANCE(KM) AND DIRECTION FROM STATIONS		
	20.03.22/1200	21.03.22/1200	22.03.22/1200
Yangon	730,SSW	440,SW	240,W
Carnicobar	200,NNE	500,N	860,N
Hut bay	80,ENE	360,NNE	710,NNE
Portblair	100,SSE	240,NNE	590,NNE
Maya bundar	230,S	110,NE	450,NNE

N:NORTH, NNE:NORTH-NORTHEAST, NE:NORTHEAST, ENE:EAST-NORTHEAST, E:EAST, SE:SOUTHEAST, SSE:SOUTH-SOUTHEAST, S:SOUTH, SSW:SOUTH-SOUTHWEST, SW:SOUTHWEST, WSW:WEST-SOUTHWEST, W:WEST, WNW:WEST-NORTHWEST, NW:NORTHWEST, NNW:NORTH-NORTHWEST



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEPRESSION OVER NORTH ANDAMAN SEA AND ADJOINING SOUTHEAST BAY OF BENGAL ON 1200 UTC OF 20TH MARCH 2022



DATE/TIME IN UTC
 IST=UTC + 0530
 L: LOW PRESSURE AREA
 WML: WELL MARKED LOW PRESSURE AREA
 D: DEPRESSION (17-27 KT)
 DD: DEEP DEPRESSION (28-33 KT)
 CS: CYCLONIC STORM (34-47 KT)
 SCS: SEVERE CYCLONIC STORM (48-63KT)
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
 ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
 SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

● LESS THAN 34 KT
 ○ 34-47 KT
 ● ≥ 48 KT
 — OBSERVED TRACK
 — FORECAST TRACK
 ▲ CONE OF UNCERTAINTY
 AREA OF MAXIMUM SUSTAINED WIND SPEED:
 ■ 28-33 KT (52-61 KMPH)
 ■ 34-49 KT (62-91 KMPH)
 ■ 50-63 KT (92-117 KMPH)
 ■ ≥ 64 KT (≥118 KMPH)

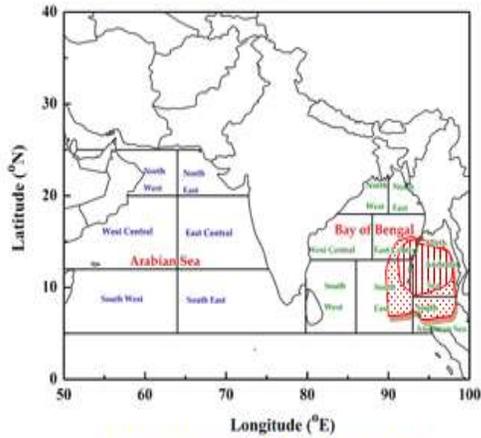
IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

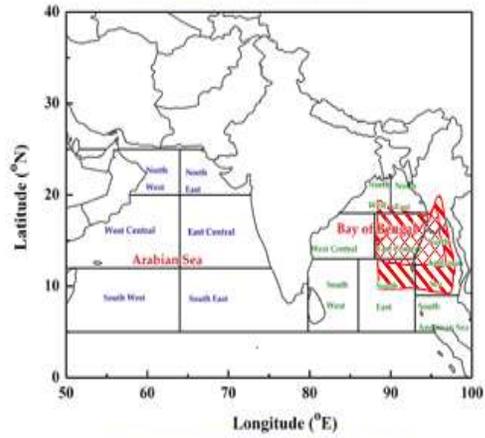
Fishermen warning Graphics

INDIA METEOROLOGICAL DEPARTMENT FISHERMAN WARNING FOR BAY OF BENGAL AND ARABIAN SEA

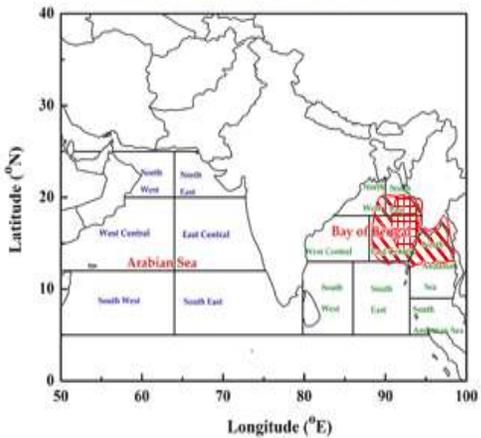
DAY-1: 20.03.2022/0600 UTC TO 21.03.2022/0600 UTC



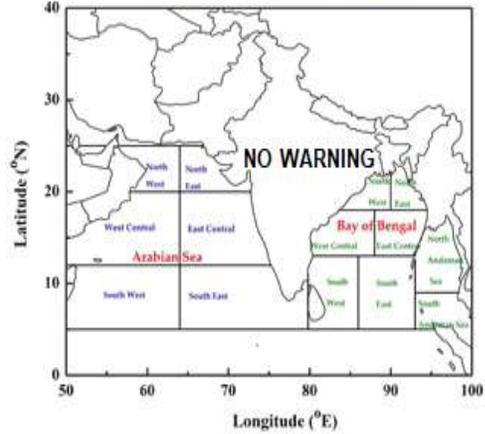
DAY-2: 21.03.2022/0600 UTC TO 22.03.2022/0600 UTC



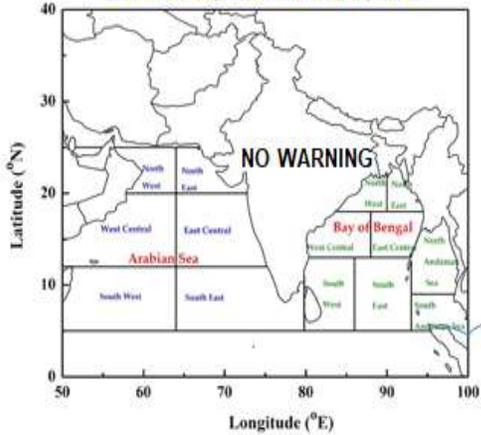
DAY-3: 22.03.2022/0600 UTC TO 23.03.2022/0600 UTC



DAY-4: 23.03.2022/0600 UTC TO 24.03.2022/0600 UTC



DAY-5: 24.03.2022/0600 UTC TO 25.03.2022/0600 UTC



AREA UNDER FISHERMEN WARNING

-  40-50 KMPH GUSTING TO 55 KMPH (SQUALLY WEATHER)
-  45-55 KMPH GUSTING TO 65 KMPH
-  50-60 KMPH GUSTING TO 70 KMPH
-  60-70 KMPH GUSTING TO 80 KMPH
-  65-75 KMPH GUSTING TO 85 KMPH